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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,991	12/02/2003	Michael M. Evans	2553.2.3	5217
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PATE PIERCE & BAIRD 175 SOUTH MAIN STREET, SUITE 1250 SALT LAKE CITY, UT 84111			EXAMINER. DANIELS, MATTHEW J	
			ART UNIT 1791	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/725,991	Applicant(s) EVANS ET AL.	
	Examiner MATTHEW J. DANIELS	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 17-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 17-62 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6 November 2007 has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1, 22, 39-41, 61, and 62** are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Shills (USPN 4743471). **As to Claim 1**, Shills teaches a method for decorating a cementitious substrate (Abstract, line 2), the method comprising:

selecting a base color scheme for a substrate formed of a cementitious material (inherent in that a cementitious material is provided having some color);

selecting an accent color scheme (2:33-35);

providing the substrate having the base color scheme and a top surface (2:62-65), the top surface having portions which could be exposed or covered (Fig. 2);

applying before curing, to the exposed portion of the surface of the substrate, a substantially random distribution of globules to form medallions, colored in the accent color scheme (3:1-20);

curing together the substrate of the accent medallions to form a durable, bonded, color-accented substrate (5:7-16), leaving medallions bonded onto the top surface. The medallions would inherently extend above the top surface

Shills is silent to the deformation of the globules. However, it is submitted that because the coloring slurries of Shills are comprised of a wet slurry mixture (5:36-37) and applied by a rotating device from a distance (Fig. 5), that they would inherently deform. In the alternative, however, it would have been obvious to adjust the height of the application device, the amount of material applied, and the speed of the "flick roll" (6:1) such that some degree of deformation occurs.

As to Claim 22, Shills teaches a coloring slurry comprised of wet cement (water and cement) and aggregates (5:36-40). **As to Claims 39 and 40**, it is submitted that the medallions of Shills are applied within a time selected to provide fully integrated cohesion between the medallions and each substrate in view of the teaching that they remain on the Shills substrate. **As to Claim 41**, the medallions of Shills are cementitious (5:37) and would have a liquid content to provide some depth of elevation variation with the substrate.

As to Claim 61, Shills teaches a method comprising:

Providing a plurality of roofing tiles (4:41-67) formed of an uncured cementitious material (5:7-16), each tile having a top surface (Figures) and portions which could be exposed and covered (Fig. 2);

selecting an accent color scheme (2:33-35);

applying before curing, to the exposed portion of the surface of the substrate, a substantially random distribution of globules to form medallions, colored in the accent color scheme (3:1-20), the distribution being applied to each tile in a substantially random arrangement (2:35-40), the distribution for each tile differing randomly from the other tiles (9:21-25);

curing together the substrate of the accent medallions to form a durable, bonded, color-accented substrate (5:7-16), and wherein the medallions would be left extending above the top surface;

Installing the plurality of roofing tiles, after curing, on a roof with some portions exposed and some portions overlapping (Fig. 2).

Shills is silent to the deformation of the globules. However, it is submitted that because the coloring slurries of Shills are comprised of a wet slurry mixture (5:36-37) and applied by a rotating device from a distance (Fig. 5), that they would inherently deform. In the alternative, however, it would have been obvious to adjust the height of the application device, the amount of material applied, and the speed of the "flick roll" (6:1) such that some degree of deformation occurs.

As to Claim 62, Shills teaches a method comprising:

Molding a plurality of roofing tiles of an uncured cementitious material (4:41-57, 5:7-16), each tile each tile having a top surface (Figures) and portions which could be exposed and covered (Fig. 2);

selecting an accent color scheme (2:33-35);

throwing (Fig. 5) onto the exposed portion of the surface of the substrate before curing (5:7-16), a substantially random distribution of globules to form medallions, colored in the accent color scheme (3:1-20);

curing the tile and the corresponding medallions simultaneously (5:7-16), and wherein the medallions would be left extending above the top surface;

Installing the plurality of roofing tiles, after curing, on a roof with some portions exposed and some portions overlapping (Fig. 2), which would display the random distribution of medallions.

Shills is silent to the deformation of the globules. However, it is submitted that because the coloring slurries of Shills are comprised of a wet slurry mixture (5:36-37) and applied by a rotating device from a distance (Fig. 5), that they would inherently deform. In the alternative, however, it would have been obvious to adjust the height of the application device, the amount of material applied, and the speed of the "flick roll" (6:1) such that some degree of deformation occurs.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 2 and 44-53** are rejected under 35 U.S.C. 103(a) as obvious over Shills (USPN 4743471) in view of Maurer (USPN 5648144). Shills teaches the subject matter of Claim 1

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above under 35 USC 102(b), or in the alternative, under 35 USC 103(a). **As to Claims 2, 44-47, 52, 53**, Shills is silent to the texturing the material with linear or other textures using a mechanical device. However, Maurer teaches that a synthetic roofing member is capable of being brushed to provide or highlight its appearance (2:5-11) and provide the texture and “feel” of natural materials (3:10). In view of the teachings of Maurer, it would have been obvious to use either an automatic or manual brushing technique. It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Maurer into that of Shills in order to provide the same natural texture, appearance, and “feel” to the process of Shills. **As to Claims 48-51**, the claimed subject matter appears to be a limitation drawn to requirement of the occupation of the individual choosing the color scheme. The Examiner asserts that Shills performing the disclosed process is both a producer, designer, architect, and user, even if not officially certified as having the credentials of these professionals.

4. **Claims 5-14, 17-21, 23-29, and 31-43, 54-60** are rejected under 35 U.S.C. 103(a) as obvious over Shills (USPN 4743471) in view of De Paoli (USPN 2835996). Shills teaches the subject matter of Claim 1 above under 35 USC 102(b), or in the alternative, under 35 USC 103(a). **As to Claims 5-14, 17-21, and 54-60**, although Shills appears to be silent to the claimed materials, De Paoli clearly provides teaching and suggestion that “The colors of the base terrazzo and the colors of the terrazzo spatter inserts can be varied to produce unusual artistic effects.” (2:28-30) Additionally, De Paoli teaches “cement...which is of uniform or complementary color with the terrazzo colors.” (3:15-18). Clearly De Paoli suggests a wide range of colors and effects, which would obviously be of different colors, inherently corresponding to or matching

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natural tones, hues, minerals, ages, biota, metal oxides, deposits, and plants, and reads on the claimed invention. It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of De Paoli into that of Shills in order to vary the appearance of the resulting product.

As to Claims 23-29, 31-33, although Shills appears to be silent to the materials, De Paoli teaches a proportion of about 20% Portland cement to aggregate (2:48-58), that the particular consistency should be changed by adjusting the proportions of aggregate and cement (2:59-63), sand that could be used as masonry sand (2:51), and varying degrees of pigment (3:11-20 and 2:26-35) and water (2:48-59). De Paoli therefore teaches that color, cement/aggregate ratio, and water represent result effective variables which should be optimized in order to produce unusual artistic effects and provide the most optimum and driest possibly consistency. It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate these aspects of the De Paoli method into that of Shills in order to provide the same benefits.

As to Claims 34-40, although Shills appears to be silent to time of placement, De Paoli teaches or suggests that the medallions should be placed on selected areas of the semi-plastic slab to form a suitable design (2:1-2). Also see De Paoli's teaching of "semi-plastic or partially cured state" (2:68-69). De Paoli clearly teaches that the ordinary artisan should choose or select a time at which the mixture is still plastic, which would have suggested to the ordinary artisan (a) any time over 1 second, and (b) that time at placement also represents a result effective variable that should be optimized to maintain the semi-plastic layer. Doing so would obviously provide integrated cohesion, as claimed.

As to **Claims 41-43**, although Shills appears to be silent to the materials, the medallions of De Paoli are formed of a cement material which would have a liquid content and depth which would obviously or inherently simulate the appearance of biota. It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of De Paoli into that of Shills in order to vary the appearance of the resulting product.

5. **Claims 3, 4, and 30** are rejected under 35 U.S.C. 103(a) as being unpatentable over are rejected under 35 U.S.C. 103(a) as obvious over Shills (USPN 4743471) in view of Arpin (USPN 2918385). Shills teaches the subject matter of Claims 1 and 22 above under 35 USC 102(b) or alternatively under 35 USC 103(a). **As to Claims 3, 4, and 30**, Shills is silent to low or zero slump concrete. However, Arpin teaches low to zero slump concrete (2:15-20), which would be the driest consistency possible because it would not provide excess water to cause slumping. It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Arpin into that of Shills in order to provide the driest consistency possible and to provide a quick setting material.

6. **Claim 53** is rejected under 35 U.S.C. 103(a) as being unpatentable over Shills (USPN 4743471) in view of Maurer (USPN 5648144), and further in view of Maletic (USPN 4940358). Shills and Maurer teach the subject matter of Claim 44 above under 35 USC 103(a). **As to Claim 53**, Shills appears to be silent to a texturing process which comprises automatically and mechanically brushing the substrate by a mechanical device. However, Maletic teaches a texturing process which comprises automatically and mechanically brushing the substrate by a

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mechanical device (Figs. 1-8). It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Maletic into that of Shills in order to provide a textured surface which would avoid slipping and which efficiently performs the texturing task.

7. **Claims 12, 17-20 and 54-60** are rejected under 35 U.S.C. 103(a) as being unpatentable over Shills (USPN 4743471) in view of Gundlach (USPN 2057679) and Chaffee (USPN 1993086). Shills teaches the subject matter of Claim 1 above under 35 USC 102(b), or alternatively, under 35 USC 103(a). **As to Claims 12, 17-20 and 54-60**, Shills teaches coloring "with a desired color" (5:40), and therefore Shills suggests that one of ordinary skill in the art should select the desired color. Clearly Shills suggests a wide range of colors and effects, which would obviously be of different colors, inherently corresponding to or matching natural tones, hues, minerals, ages, biota, metal oxides, deposits, and plants, and reads on the claimed invention.

Although Shills is believed to suggest all color variations, Shills does not explicitly teach that the colors simulate biota. "Biota" may be interpreted to be any of the colors that simulate those of biota found in nature. Alternatively, "biota" may be interpreted to be a green color. In this alternative interpretation, Shills is silent to the biota colors. However, Gundlach teaches that green pigment may be mixed with aggregates and cement to form objects that are suitable as medallions (page 1, left column, line 54 - page 1, right column, line 39) and Chaffee teaches that it is conventional to provide cementitious roofing tiles with a green coloring (page 2, left column, line 25 – page 2, right column, line 51). It would have been prima facie obvious to one

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of ordinary skill in the art at the time of the invention to incorporate the methods of Gundlach and Chaffee into that of Shills in order to provide cement having a highly weather resistant, aesthetically pleasing, and natural looking coloring to the articles of Shills. Also note that Chaffee additionally suggests at least one texture (page 2, left column, lines 56-68).

Response to Arguments

8. Applicant's arguments filed 25 October 2007 have been fully considered but they are not persuasive or are moot in view of the new grounds of rejection set forth above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW J. DANIELS whose telephone number is (571)272-2450. The examiner can normally be reached on Monday - Friday, 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read "Matthew J. Daniels". The signature is stylized with a large, looped "M" and a long, sweeping "D".

Matthew J. Daniels

A.U. 1791
20 January 2008